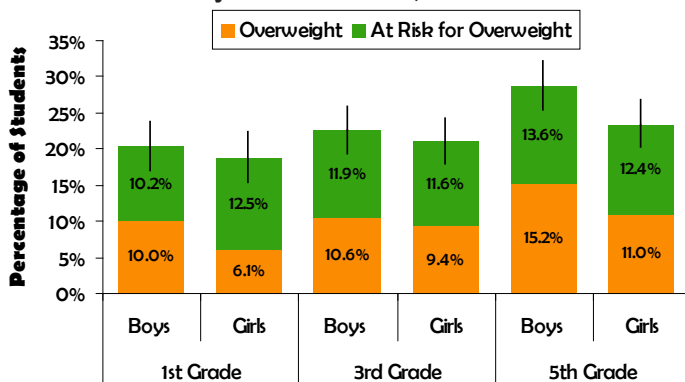


# Childhood Overweight in Utah, 2006

From January to April 2006, 4,310 students (1st, 3rd, and 5th Grades) from 69 randomly selected public elementary schools throughout the state were weighed and measured in order to determine the extent of childhood overweight in Utah. The collected data represent all elementary school students in Utah. This study was conducted by the Utah Department of Health, Local School Districts, and School Nurses.

**Figure 1.**

**Percentage of Students Overweight or at Risk of Overweight by Grade and Sex, Utah 2006**



Source: 2006 Utah Height/Weight Study, Utah Department of Health.

## Body Weight Terminology:

Body Mass Index (BMI) is a standardized measurement based on height and weight that is used to estimate the amount of body fat for an individual.

BMI between 85<sup>th</sup> and 95<sup>th</sup> percentiles

Adults are called overweight.

Children are called at risk for overweight.

BMI over 95<sup>th</sup> percentile

Adults are called obese.

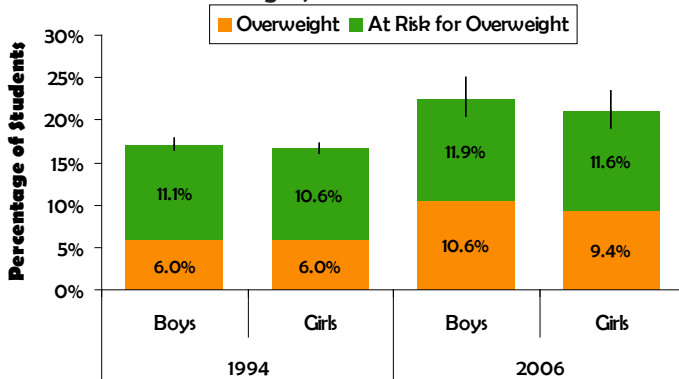
Children are called overweight.

In 2006, more than one in five Utah elementary school students were at an unhealthy weight, or about 223,480 students.

In Utah, we have seen an increase over time in the percentage of 3rd Grade students who are overweight.

**Figure 2.**

**Percentage of 3rd Grade Students Overweight or At Risk of Overweight, Utah 1994 and 2006**



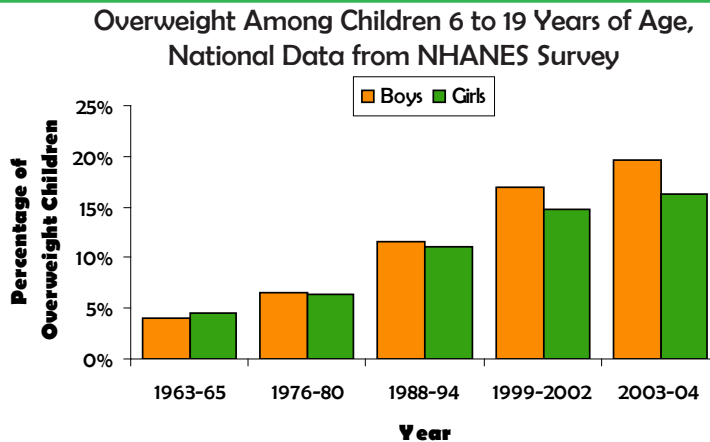
Source: 1994 Bureau of Health Promotion, Heart Disease and Stroke Prevention and 2006 Utah Height/Weight Study, Utah Department of Health.

- More boys were overweight at every Grade.
- The percentage of overweight students increased with Grade.
- In 2006, 22.5% of all elementary students were at an unhealthy weight.
- In 1994, 16.9% of 3rd Graders were at an unhealthy weight and, in 2006, it increased to 21.8%. This represents a 67% increase in 12 years.
- Third Grade rates of unhealthy weight are similar to the rate for all elementary grades (Grades 1-6).
- If the number of elementary school students at an unhealthy weight continues to increase at the current rate, in ten years a total of 30.3% of elementary school students will be at an unhealthy weight.

## National Data for Children

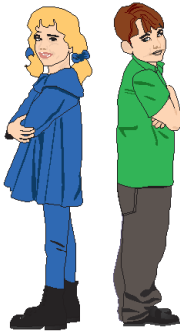
National data for children show an increase in body weight over time.

**Figure 3.**



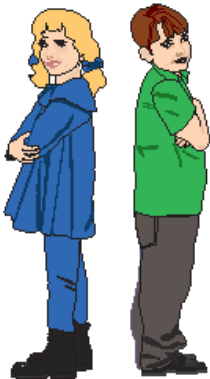
Source: National Health and Nutrition Examination Survey (1963-65, 1976-80, 1988-94, 1999-2002, and 2003-04).

- Continued increase in percentage of overweight children.
- More boys are overweight compared to girls.
- Percentage of overweight has more than doubled since the 1960's.
- The proportional increase is greater for older children.



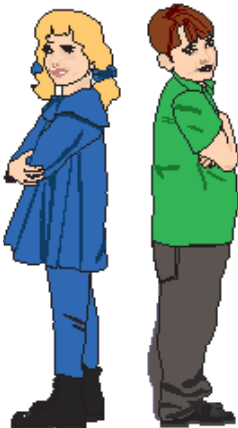
### First Graders' (5-Year Old Children) Weight Has Increased 4.6% in 20 Years. (Ogden et. al., 2004)

- In 1971-74 the average boy was 44.4 inches tall and weighed 44.4 lbs
- In 1999-2002 the average boy was 44.5 inches tall and weighed 46.9 lbs
- In 1971-74 the average girl was 44.2 inches tall and weighed 43.3 lbs
- In 1999-2002 the average girl was 44.3 inches tall and weighed 45.3 lbs
- A 5.6% increase in body weight over 20 years for boys
- A 4.6% increase in body weight over 20 years for girls



### Third Graders' (7-Year Old Children) Weight Has Increased 6.5% in 30 Years. (Ogden et. al., 2004)

- In 1963-65 the average boy was 49.0 inches tall and weighed 54.3 lbs
- In 1999-2002 the average boy was 49.7 inches tall and weighed 59.8 lbs
- In 1963-65 the average girl was 48.6 inches tall and weighed 53.4 lbs
- In 1999-2002 the average girl was 49.0 inches tall and weighed 56.9 lbs
- A 10.1% increase in body weight over 30 years for boys
- A 6.5% increase in body weight over 30 years for girls



### Fifth Graders' (9-Year Old Children) Weight Has Increased 12.9% in 30 Years. (Ogden et. al., 2004)

- In 1963-65 the average boy was 53.3 inches tall and weighed 68.5 lbs
- In 1999-2002 the average boy was 54.4 inches tall and weighed 79.2 lbs
- In 1963-65 the average girl was 53.3 inches tall and weighed 69.1 lbs
- In 1999-2002 the average girl was 53.9 inches tall and weighed 78.0 lbs
- A 15.6% increase in body weight over 30 years for boys
- A 12.9% increase in body weight over 30 years for girls

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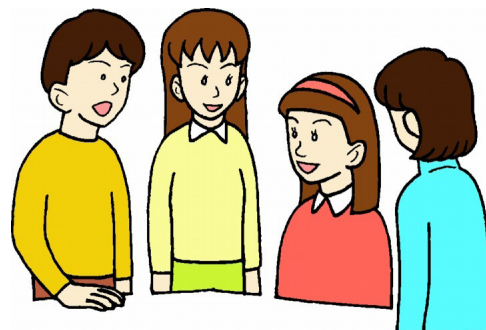
## The Effects of Childhood Overweight

### Childhood overweight predicts obesity later in life

- 80% of children who were overweight at any time during the elementary period were overweight at 12 years of age (Nader, 2006)

### Adult diseases now observed in overweight children

- Hardening of arteries, hypertension, or hyperlipidemia which can lead to heart disease (Freedman, 1999; Gidding, 1995, Cabrinety, 2002, Berenson, 1998, Ernst, 1994)
- Diabetes (Pinhas-Hamiel, 1996)
- Glucose intolerance (Shinha, 2002)
- Sleep-associated breathing disorders (Mallory, 1989)
- Iron deficiency (anemia) (Nead, 2004)



### Social and psychological impact of childhood overweight

- Social isolation (Strauss, 2003)
- Increased rate of suicidal thoughts and attempts associated with weight-based teasing (Eisenberg, 2003)
- Low self-esteem due to low body image (Strauss, 2000)
- Increased rate of anxiety disorders and depression in overweight girls (Anderson, 2006)
- Increased likelihood to report difficulties in school (Schwimmer, 2003)
- Reduced self-assessed quality of life (Williams, 2005)

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“Because of the increasing rates of obesity, unhealthy eating habits, and physical inactivity, we may see the first generation that will be less healthy and have a shorter life expectancy than their parents.”

US Surgeon General Richard Carmona, March 2004

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## How can we impact children's lives to change this trend?

### We can change this trend by working with:



**Communities**



**Government**



**Health Care**



**Media**



**Schools**



**Worksites**



**Family**

In 2006 the Utah Department of Health published a blueprint describing how to address childhood overweight in Utah. Objectives and strategies for each of the above groups were included. This document is found on the internet at [www.health.utah.gov/obesity/docs/obesityblueprint.pdf](http://www.health.utah.gov/obesity/docs/obesityblueprint.pdf).

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### Resources:

Bureau of Health Promotion. Tipping the Scales Toward a Healthier Population: A Report of Overweight and Obesity in Utah. Salt Lake City, Utah: Utah Department of Health, 2005. Located on the internet at <http://health.utah.gov/obesity/>

Obesity in Utah. Utah Department of Health, Bureau of Health Promotion. Located on the internet at <http://health.utah.gov/obesity/>

Check Your Health. Utah Department of Health, Intermountain Healthcare, and KUTV Channel 2 News. Located on the internet at <http://www.checkyourhealth.org/>

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